COMMONWEALTH OF KENTUCKY

BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

LOUISVILLE GAS AND ELECTRIC COMPANY	)	
	)	
_____	)	CASE NO. 96-246
	)	
ALLEGED VIOLATION OF COMMISSION REGULATION 807 KAR 5:041, SECTION 3	)	

O R D E R

The Louisville Gas and Electric Company ("LG&E"), a Kentucky corporation which engages in the distribution of electricity to the public for compensation for light, heat, power, and other uses, is a utility subject to Commission jurisdiction. KRS 278.010; KRS 279.210.

KRS 278.280(2) directs the Commission to prescribe rules and regulations for the performance of services by utilities. Pursuant to this statutory directive, the Commission promulgated Commission Regulation 807 KAR 5:041, Section 3, which requires electric utilities to maintain their plant and facilities in accordance with the standards of the National Electrical Safety Code (1990 edition) ("NESC").

NESC Code Section 013B provides that facilities which are in compliance with the NESC edition in effect at the time of their construction need not comply with the current edition of the NESC.

On October 1, 1983, Commission Regulation 807 KAR 5:041, Section 3, required an electrical utility to construct and maintain its facilities in accordance with the National Electrical Safety Code (1981 ed.) ("1981 NESC").

Commission Staff has submitted to the Commission an Accident Investigation Report dated May 14, 1996, appended hereto, which alleges:

1. On December 28, 1995, Nicholas Poth was fatally injured while installing cable television service at 4801 Toledo Lane, Louisville, Kentucky.

2. At the time of the incident, Poth stood on a fiber glass extension ladder that was leaning against an LG&E utility pole and positioned directly under a 7200 volt conductor. He was electrocuted when the conductive extension of the fiberglass pole which he was using to pull coaxial cable through a nearby tree came into contact with the 7200 volt overhead conductor.

3. LG&E owned the 7200 volt overhead conductor.

4. LG&E installed the utility pole in question on October 1, 1983.

5. After the incident on December 28, 1995, Commission Staff measured the line clearances of the facilities in question. It found, inter alia, that the vertical clearance between the telephone conductor and the cut-out on the utility pole was 36 inches.

6. The vertical clearance between the telephone conductor and the cut-out did not comply with 1981 NESC Section 235C1 which requires a vertical clearance of 40 inches between communications conductors and open supply conductors having a voltage of 7200 volts.

7. The vertical clearance between the telephone equipment and the cut-out did not comply with 1981 NESC Section 238B which requires a vertical clearance of 40 inches between communications equipment and supply conductors located on the same structure.

8. As a result of these failures, LG&E is in probable violation of Commission Regulation 807 KAR 5:041, Section 3.

Based on its review of the Accident Investigation Report and being otherwise sufficiently advised, the Commission finds that prima facie evidence exists that LG&E failed to comply with Commission Regulation 807 KAR 5:041, Section 3.

The Commission, on its own motion, HEREBY ORDERS that:

1. LG&E shall appear before the Commission on September 10, 1996 at 10:00 a.m., Eastern Daylight Time, in Hearing Room 1 of the Commission's offices at 730 Schenkel Lane, Frankfort, Kentucky, for the purpose of presenting evidence concerning the alleged violations of Commission Regulation 807 KAR 5:041, Section 3, and of showing cause why it should not be subject to the penalties prescribed in KRS 278.990(1) for these alleged violations.

2. LG&E shall submit to the Commission within 20 days of the date of this Order a written response to the allegations contained in the Accident Investigation Report.

3. The Accident Investigation Report of May 14, 1996, a copy of which is appended hereto, is made part of the record of this proceeding.

4. Any motion requesting any informal conference with Commission Staff to consider any matter which would aid in the handling or disposition of this proceeding shall be filed with the Commission no later than 20 days from the date of this Order.

Done at Frankfort, Kentucky, this 11th day of June, 1996.

PUBLIC SERVICE COMMISSION

Linda K. Breathitt
Chairman

Edward J. Holmes
Vice Chairman

Robert M. Davis
Commissioner

ATTEST:

Don Mills
Executive Director

Kentucky Public Service Commission
Accident Investigation
Staff Report

Utility:	Louisville Gas and Electric Company				
Reported By:	Mr. George R. Siemens, Jr.				
Dates & Times					
Accident Occurred:	12-28-95 2:30 p.m.				
Utility Notified:	12-28-95 2:33 p.m.				
PSC Notified:	12-28-95 3:25 p.m.				
Investigated:	12-28-95				
Written Report Rcvd:	01-04-96				
Location of Accident:	4801 Toledo Lane, Louisville, KY				
Description of Accident:	Mr. Poth was in the process of installing cable television service. He was standing on a ladder at LG&E's utility pole and used a fiberglass pole with a conductive extension to fish coaxial cable through some nearby trees. The conductive extension made contact with the cutout, resulting in electrocution.				
Victims:					
Name:	Mr. Nicholas Poth	**FATAL:**	Yes	**AGE:**	31
Addr./Empl.:	NaCom				
Injuries:	Electrocution				
Witnesses:	None				
Name:					
Addr./Empl.:					

Kentucky Public Service Commission
Accident Investigation
Staff Report

Persons Assisting in the Investigation:	
Name:	Mr. Thomas G. Fortney
Addr./Empl.:	NaCom, Project Manager
Name:	Mr. Larry Miller
Addr./Empl.:	LG&E, Fire & Security Investigator
Name:	Mr. George Siemens
Addr./Empl.:	LG&E, Director, External Affairs
Probable Violations:	807 KAR 5:041, Section 3, 1981 NESC: Rule 235C1, Vertical Clearance Between Line Conductors and/or Rule 238B, Vertical Clearance Between Line Wires, Conductors, or Cables and Non-current Carrying Metal Parts of Equipment Located at Different Levels on the Same Structure.

Line Clearances:	**Measured**	**Minimum Allowed by NESC**	**NESC Edition 1981**	**Voltage**
Telephone Drop to Ground Elev.:	21 feet	10 feet	Rule 232A, Table 232-1	NA
Cut-Out to Ground Elev.:	24 feet	18 feet	Rule 232C, Table 232-2	7200 Volts
Cut-Out to Telephone Drops:	41 inches, diagonal measurement	Not Applicable	Not Applicable - Used to Check Vertical	7200 Volts
Cut-Out to Pole:	1 foot 10 inches, horizontal measurement	Not Applicable	Not Applicable - Used to Check Vertical	7200 Volts

Kentucky Public Service Commission
Accident Investigation
Staff Report

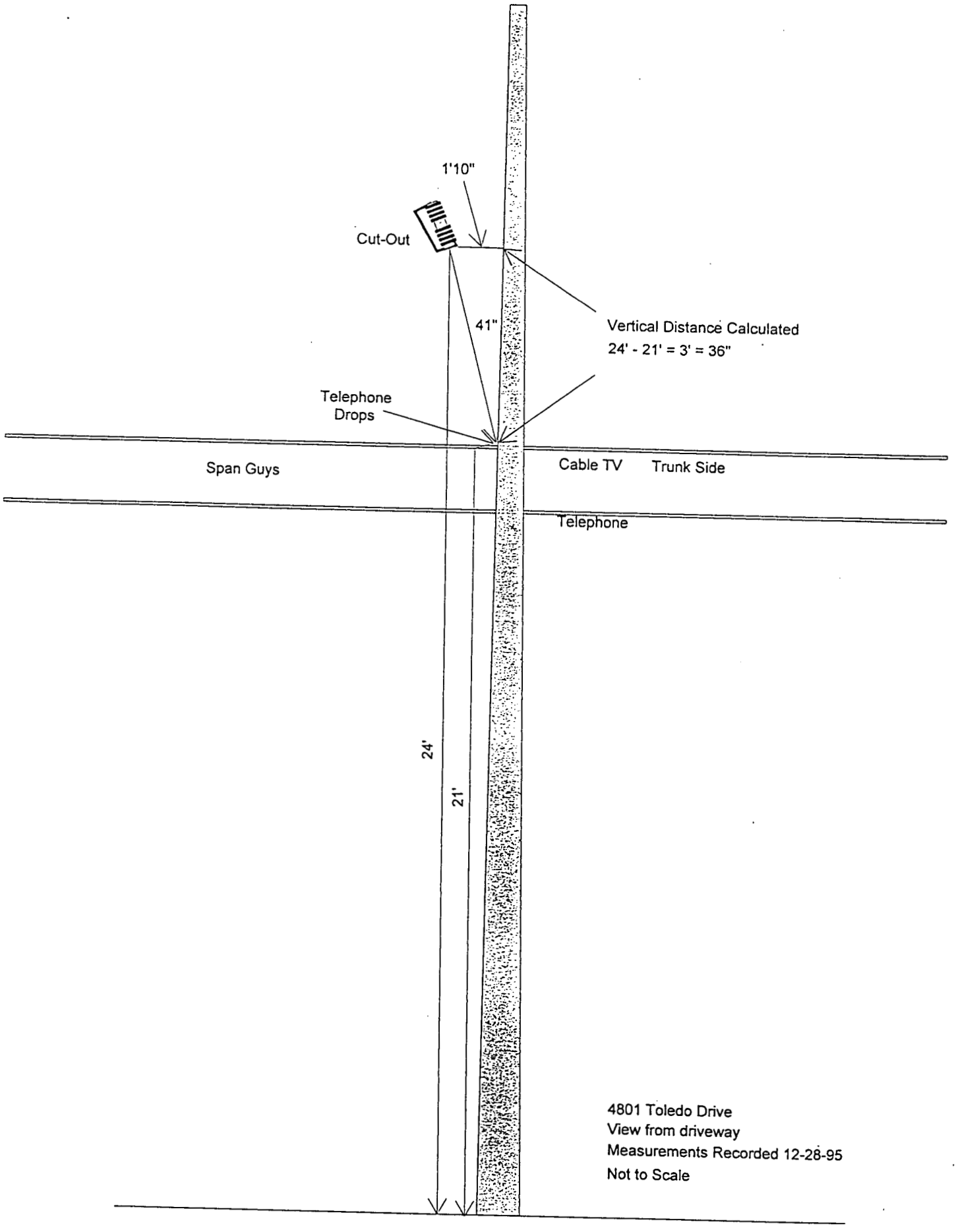
Cut-Out to Telephone Drops:	36 inches, vertical distance calculated	40 inches, vertical	Rule 235C, Table 235-5 or Rule 238B, Table 238-1	7200 Volts
Remarks:	The above listed measurements were made by LG&E personnel, at my direction, on December 28, 1995. I observed readings measured to the ground, but was unable to view the aerial readings. I advised LG&E of my intent to return with John Land, a staff inspector, to perform our own measurements. We returned to the site on February 7, 1996, but found that the cut-out assembly had been removed. Later, it was discovered that drawings submitted by LG&E were in conflict with the above listed measurements. We returned to the site on March 6, 1996, and found a 0.5 inch difference between the original measurement for the telephone drops to ground elevation clearance. A 6.5 inch difference was found between LG&E's drawings and our measurements of the telephone company span guy ground clearance. The vertical distance between the cut-out and communications facilities (telephone service drops) was calculated as follows: Cut-out to Ground Elevation (24 feet) minus Telephone Drop to Ground Elevation (21 feet) = 3 feet, or 36 inches.			
Investigated By:	Martha M. Morton			
Signed:	Martha M. Morton			

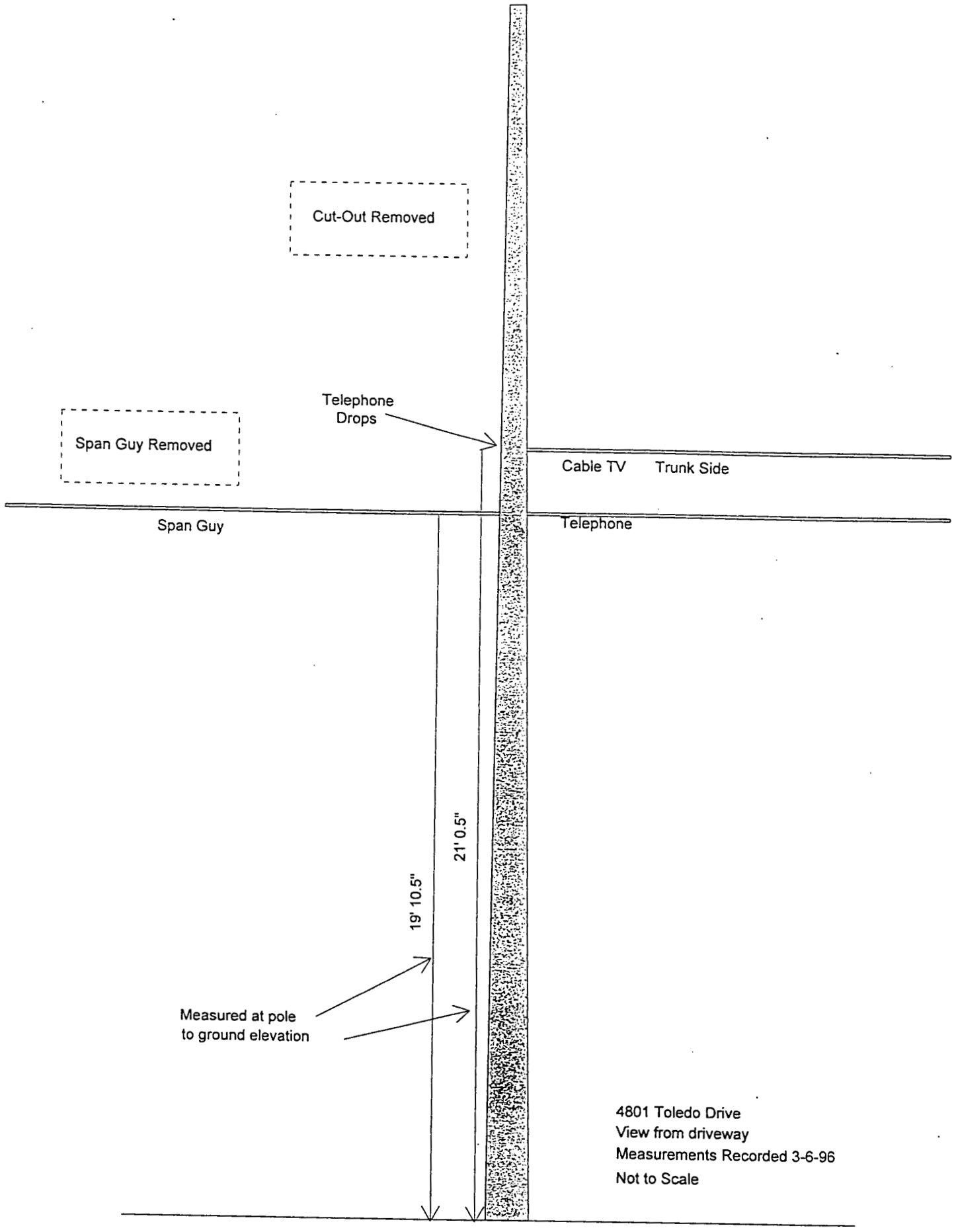
Attachments:

A - Staff Drawings Summarizing Measurements
B - Correspondence
C - LG&E's Written Report
D - Drawings Provided by LG&E

Attachment A

Staff Drawings Summarizing Measurements


1'10"
Cut-Out
41"
Vertical Distance Calculated
24' - 21' = 3' = 36"
Telephone
Drops
Span Guys
Cable TV
Trunk Side
Telephone
24'
21'
4801 Toledo Drive
View from driveway
Measurements Recorded 12-28-95
Not to Scale


Cut-Out Removed
Span Guy Removed
Telephone
Drops
Cable TV
Trunk Side
Span Guy
Telephone
21' 0.5"
19' 10.5"
Measured at pole
to ground elevation
4801 Toledo Drive
View from driveway
Measurements Recorded 3-6-96
Not to Scale

Attachment B

Correspondence

COMMONWEALTH OF KENTUCKY
PUBLIC SERVICE COMMISSION
730 SCHENKEL LANE
POST OFFICE BOX 615
FRANKFORT, KY 40602
(502) 564-3940

February 9, 1996

Mr. George Siemens
Louisville Gas and Electric Company
P. O. Box 32010
Louisville, KY 40232-2010

Re: Accident Investigation
F. Nicholas Poth

Dear Mr. Siemens:

On February 7, 1996, we returned to the accident site and found that the cutout assembly had been replaced. Please provide the following information:

1. An explanation of why it was necessary to replace the cutout.

2. The date of replacement.

3. Copies of any work orders related to the replacement of the cutout.

I would appreciate a response by February 20, 1996 so we may complete this investigation.

Sincerely,

Martha M. Morton
Manager, Electric Branch
Division of Engineering and Services

George R. Siemens, Jr.
Director
External Affairs

Louisville Gas and Electric Company
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40232
502-627-2323
502-627-2930 FAX

February 20, 1996

Ms. Martha M. Morton
Manager, Electric Branch
Division of Engineering and Services
Kentucky Public Service Commission
730 Schenkel Lane
P.O. Box 615
Frankfort, KY 40602

Re: Accident Investigation -- F. Nicholas Poth

Dear Ms. Morton:

In response to your letter dated February 9, 1996, listed below is the information which you requested.

1. **An explanation of why it was necessary to replace the cutout.**

   After all photographs and measurements were taken, the equipment which showed evidence of electrical arcing and burns was removed as a normal course of action to ensure the preservation and integrity of the equipment involved for evidence purposes should a legal proceeding arise.

2. **The date of replacement.**

   The cutout in question was replaced on the evening of December 28, 1995 after all photographs and measurements were taken.

3. **Copies of any work orders related to the replacement of the cutout.**

   Attached is a copy of the correction order issued on December 28, 1995.

If you desire any further information or have additional questions, please do not hesitate to contact me.

Sincerely,

George R. Siemens

Attachment

EEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEEE
Addr: 4801 TOLEDO LN Rec By 2050 Mapscu 205 G T C F
Name: FIRE DEPT Mtf By Grd 39806-83114 FRJ
Time: 28-DEC-1995 14:33 Phone - Assigned at 28-DEC-1995 14:41 Addl
Tlm Tag: Dty SE Dt2 SE Sz PCB -1 Custs 1 WHC 1
Tr:23277 MN 3124q Nature Of Complaint qq Noc_Code 19 N_R FMIS_WO
Shock Complaint

Complaint Answered at 28-DEC-1995 15:18 By 1352 MCMILLIAN Cause
qqqqqqqqqqqqqqqqqqqqqqqqqqq Conditions Found qqqqqqqqqqqqqqqqqqqqqqqqqqqq
NICHOLAS POTH 407-84-3776 1707 CRYSTAL DR. LAGRANGE KY. 40031
SEE LARRY MILLER'S REPORT.

qqqqqqqqqqqqqqqqqqqqqqqqqqq Corrections Made qqqqqqqqqqqqqqqqqqqqqqqqqqqq

qqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqqq
Status C Slot 6 Pip Recd Pcom Aff Custs 1
C.O. Create 28-DEC-1995 14:33 Repair: 28-DEC-1995 19:59 Comp:
Press RETURN for next record, Control-Z to quit, or Help for more information.

2077

ADDRESS 4601 Toledo COS 770361

WOS _____ TIME ASSIGN 1440 TIME COMPLETE 1855 DATE 12-25-95

CIRCUIT _____ REPL # 201 TECHNICIAN M BEAVIN-DIXON

UED CIR _____ TROUBLE CODE ORIGINAL 19 TROUBLE CODE REVISED _____

REMARKS SEE Corky Miller Report

OUTAGE RESTORATION SEQUENCE (ACTION Codes: O-open; C-close)
(DEVICE Type: B-breaker; R-recloser; S-switch; F-fuse; T-transformer)

TIME	ACTION	DEVICE	FUSE SIZE	STRAND SIZE or TAP	LOCATION

OUTAGE CAUSE REPORTING UNSCHEDULED OUTAGES (Codes 2, 7, or 75) (MUST check ONE ONLY in each category)

A - SYSTEM CONDITION @ OUTAGE
- ( ) (1) NORMAL
- ( ) (2) SWITCHED ABNORMAL
- ( ) (3) EMPTION
- ( ) (4) DEVICE MISCOORDINATION
- ( ) (5) SUBSTATION PROBLEM

B - WEATHER CONDITION @ OUTAGE
- ( ) (1) CALM/MILD
- ( ) (2) WIND ONLY
- ( ) (3) RAIN ONLY
- ( ) (4) WIND AND RAIN
- ( ) (5) SNOW/ICE ONLY
- ( ) (6) STORM

C - CAUSE OF OUTAGE
- ( ) (11) WILDLIFE
- ( ) (12) TREE TOUCHING
- ( ) (13) TREE LIMB FELL
- ( ) (14) TREE FELL
- ( ) (15) LIGHTNING
- ( ) (21) VEHICLE
- ( ) (22) DIG-IN
- ( ) (23) PUBLIC INTERFERENCE
- ( ) (31) OPERATOR INTERFERENCE
- ( ) (41) CUSTOMER EQUIPMENT
- ( ) (51) LG&E EQUIPMENT FAILURE
- ( ) (52) LOOSE CONNECTION
- ( ) (91) OVERLOAD
- ( ) (92) BAD/REACTED
- ( ) (98) OTHER (remark)
- ( ) (99) UNKNOWN

D - EQUIPMENT AFFECTED
- ( ) (11) CUTOUT/CARRIER
- ( ) (12) VAD SWITCH
- ( ) (13) LB SWITCH
- ( ) (14) GANG OPER SWITCH
- ( ) (15) SWITCHGEAR
- ( ) (16) RECLOSER
- ( ) (17) OIL SWITCH
- ( ) (21) CAPACITOR
- ( ) (25) PORCELAIN ARRESTOR
- ( ) (26) MOV ARRESTOR
- ( ) (31) TRANSFORMER BUSHING
- ( ) (32) TRANSFORMER LOW
- ( ) (33) OVERHEAD TRANSFORMER
- ( ) (35) SUBURBAN TRANSFORMER
- ( ) (36) 1Ø PADMOUNT TRANSFORMER
- ( ) (37) 3Ø PADMOUNT TRANSFORMER
- ( ) (38) NETWORK TRANSFORMER
- ( ) (41) BARE WIRE
- ( ) (42) POLY WIRE
- ( ) (43) TREE WIRE
- ( ) (44) SPACER CABLE
- ( ) (45) CONDUIT
- ( ) (47) RISER
- ( ) (48) UNDERGROUND CABLE
- ( ) (51) NEUTRAL
- ( ) (52) SERVICE WIRE
- ( ) (53) SECONDARY WIRE
- ( ) (54) GUY WIRE/ANCHOR ROD
- ( ) (61) OVHD SPLICE
- ( ) (62) CONNECTOR
- ( ) (64) UNDG SPLICE
- ( ) (65) ELBOW
- ( ) (66) POTHEAD/TERMINATOR
- ( ) (71) PORCELAIN INSULATOR
- ( ) (72) POLY INSULATOR
- ( ) (73) POST TYPE INSULATOR
- ( ) (81) POLE
- ( ) (85) CROSS ARM WOOD
- ( ) (86) CROSS ARM STEEL
- ( ) (87) 3-EYE-BRACKET
- ( ) (91) SERVICE DROP
- ( ) (92) METER
- ( ) (94) CUSTOMER EQUIPMENT
- ( ) (95) FOREIGN EQUIPMENT
- ( ) (98) OTHER (remark)
- ( ) (99) UNKNOWN

E - TYPE CONSTRUCTION
- ( ) (11) FLAT
- ( ) (12) VERTICAL
- ( ) (13) ARMLESS
- ( ) (14) SPACER
- ( ) (21) WOOD POLES
- ( ) (22) STEEL POLES
- ( ) (23) CONCRETE POLES
- ( ) (24) TOWERS
- ( ) (31) UNDG DIRECT BURIED
- ( ) (32) UNDG DIRECT BURIED DUCT
- ( ) (33) UNDG ENCASED DUCT
- ( ) (98) OTHER (remark)
- ( ) (99) UNKNOWN

Form SD 236 Rev.8/95

Attachment C

LG&E's Written Report

George R. Siemens, Jr.
Director
External Affairs

Louisville Gas and Electric Company
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40232
502-627-2323
502-627-2930 FAX

January 2, 1996

Ms. Martha Morton, Manager
Electrical Branch
Kentucky Public Service Commission
730 Schenkel Lane
P.O. Box 615
Frankfort, KY 40602

RE: Electrocution at 4801 Toledo Lane
Louisville, Kentucky -- December 28, 1995

Dear Ms. Morton:

Attached is an "Investigation Report" prepared by Larry Miller on the above incident. This is filed in compliance with the seven-day reporting requirement.

If you need additional information concerning this incident, please let me know.

Sincerely,

George R. Siemens

Attachment

Louisville Gas and Electric Company
220 West Main Street
P.O. Box 32010
Louisville, Kentucky 40232

PROPERTY AND CASUALTY CLAIMS
INVESTIGATION REPORT

ELECTRICAL CONTACT
Type of Report

95-E-056
Report Number

A.L. Miller
Investigator

December 28, 1995
Date of Incident

Reference: Electrocution

Location: 4801 Toledo Lane
Louisville, KY 40272

Case Summary:

LG&E received a call at 2:33 p.m. on Thursday, December 28, 1995, from the Pleasure Ridge Park Fire Department advising of a possible electric shock. LG&E dispatched a crew to the scene at 2:41 p.m.

Larry Miller, Fire and Security Investigator, arrived at the scene at 4:15 p.m. LG&E personnel, TKR, NACOM (the TKR subcontractor performing the work), Jefferson County Police, Pleasure Ridge Park Fire personnel, and news media were on the scene.

The deceased, Frederick Nicholas Poth, 1707 Crystal Drive, LaGrange, Kentucky, was 31 years of age and had worked for NACOM for approximately thirteen years.

Mr. Poth was installing cable for TKR to 4801 Toledo Lane when the incident occurred. He was standing on a fiberglass extension ladder that was placed against LG&E's utility pole. The ladder was positioned directly under the 7200 volt stinger. He was using a fiberglass pole with an aluminum extension in an attempt to pull the cable wire up through a nearby tree to the pole. It appears that his left hand was on the aluminum portion of the pole and his right hand was on the head guy for the cable TV line when the top portion of the aluminum extension pole touched the top section of the cutout, resulting in electrocution.

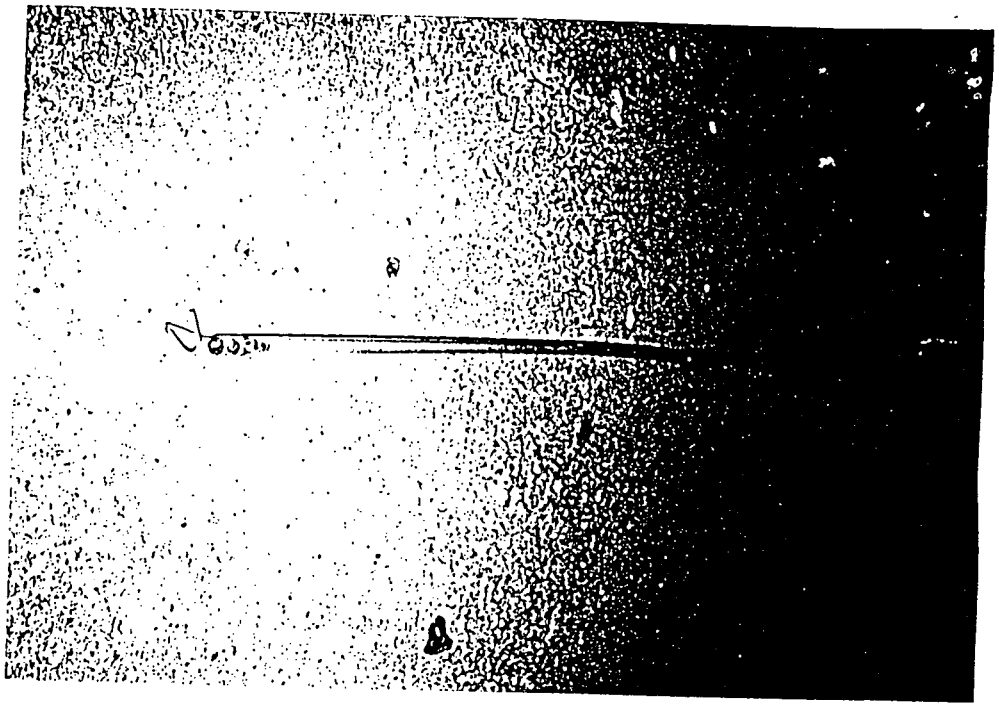
alm

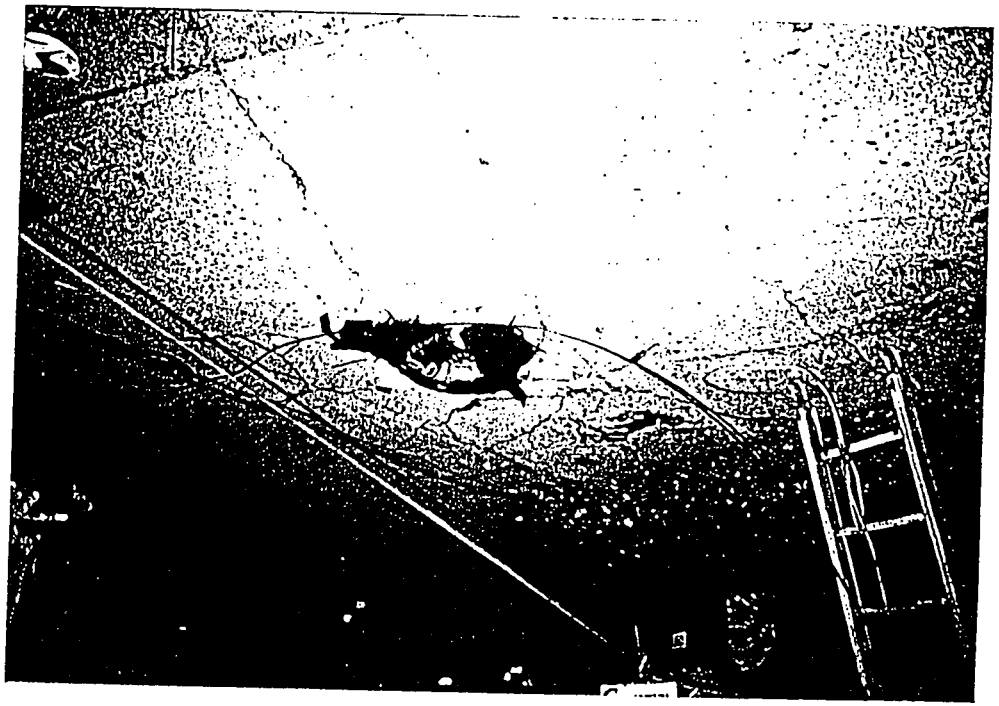
The utility pole was originally installed on December 8, 1955. It was replaced on October 1, 1983. The vertical clearance between communication conductors and supply equipment as measured by Ron Hasch, LG&E Job Coordinator at the scene, was thirty inches. Our measurement indicated a forty-one inch clearance from the lowest conductor energizing the transformer to the TKR cable.

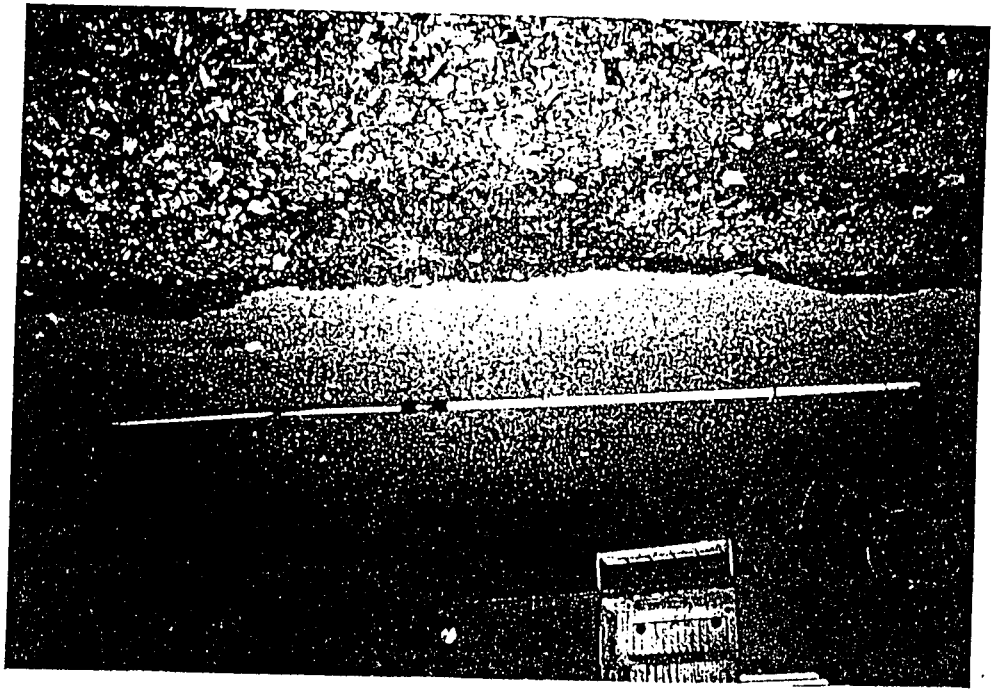
The Public Service Commission was notified by George Siemens at approximately 3:25 p.m. Martha Morton, Manager of the Electrical Branch, was driven to the scene by Mr. Siemens at approximately 6:20 p.m.

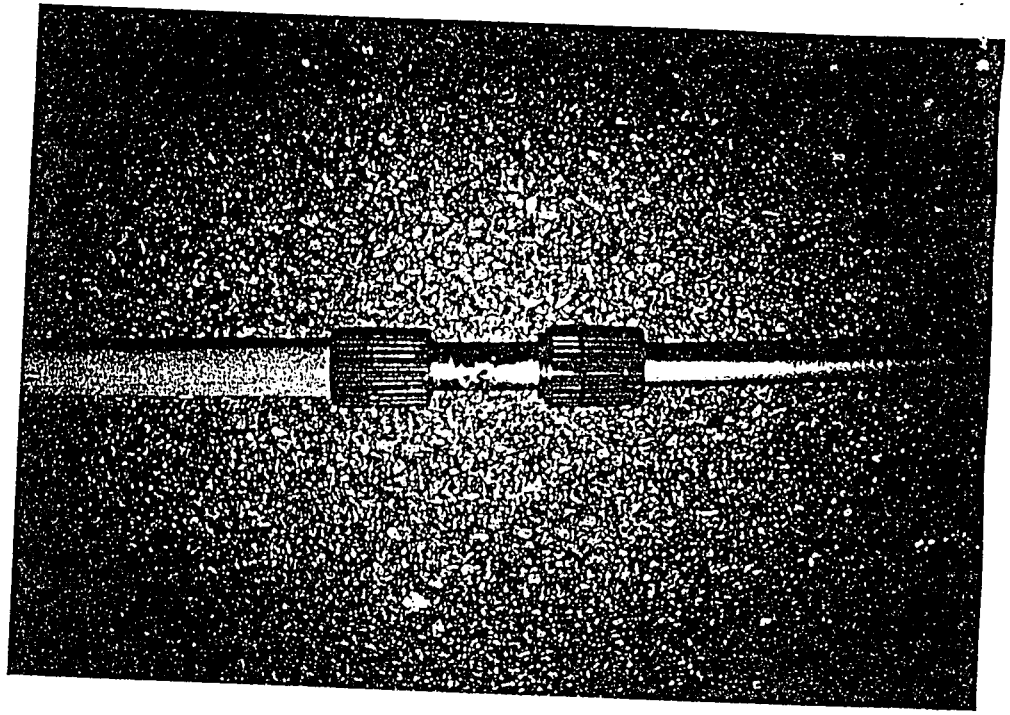
Photographs were taken at the scene.

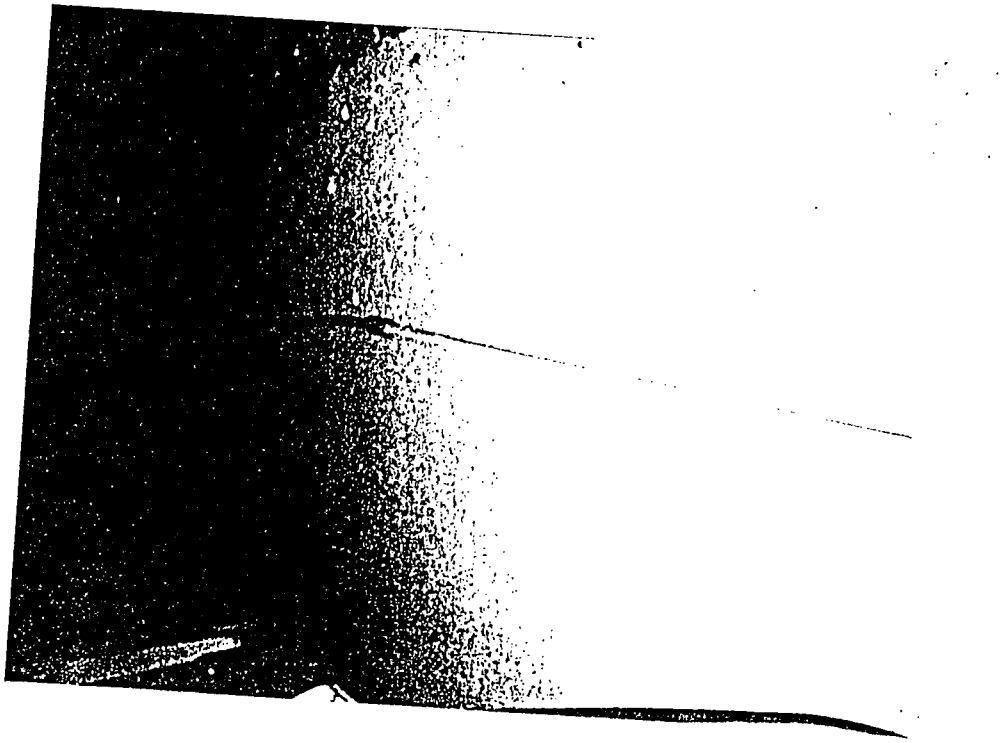
ALM

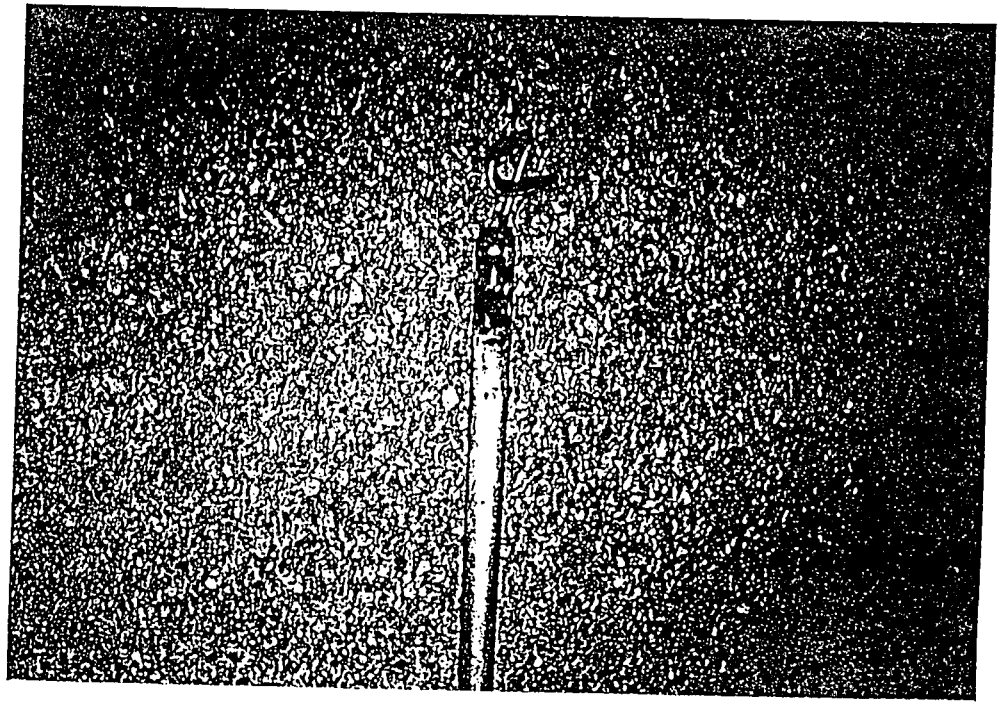


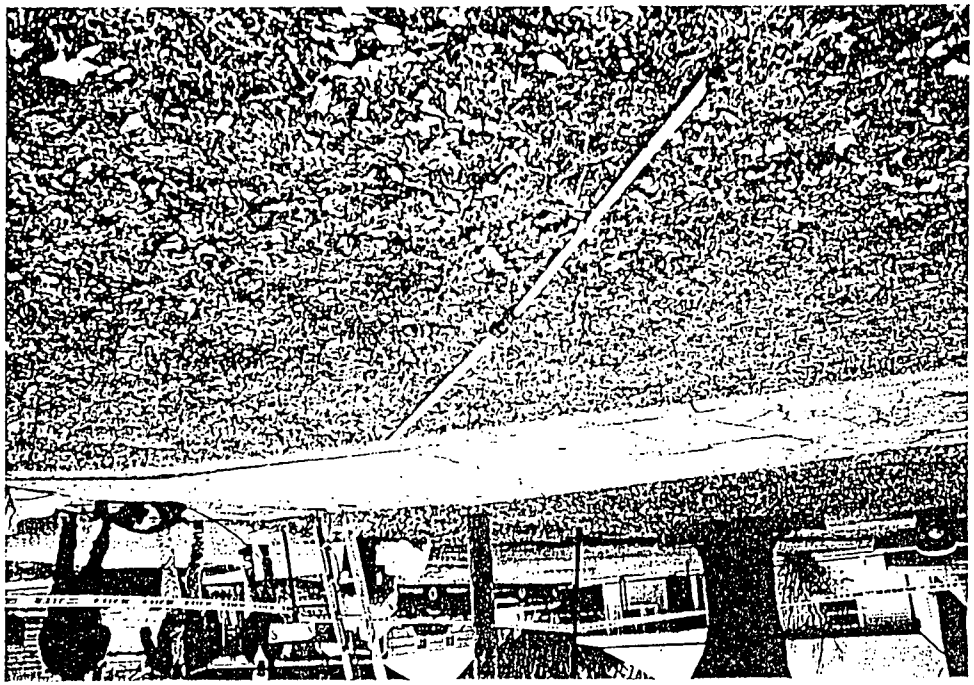


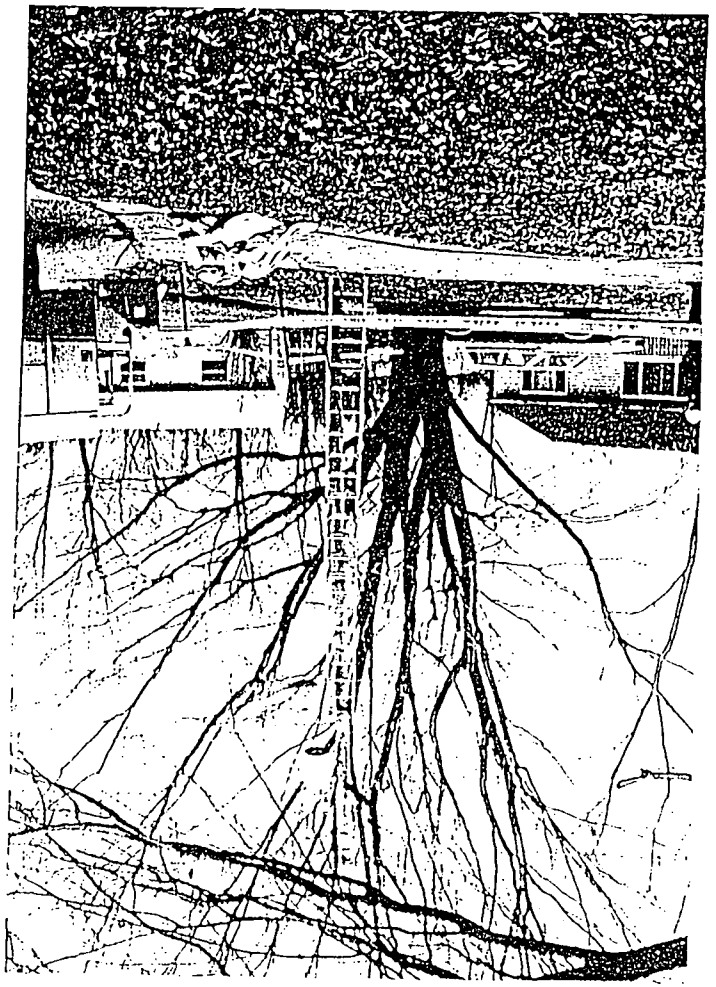


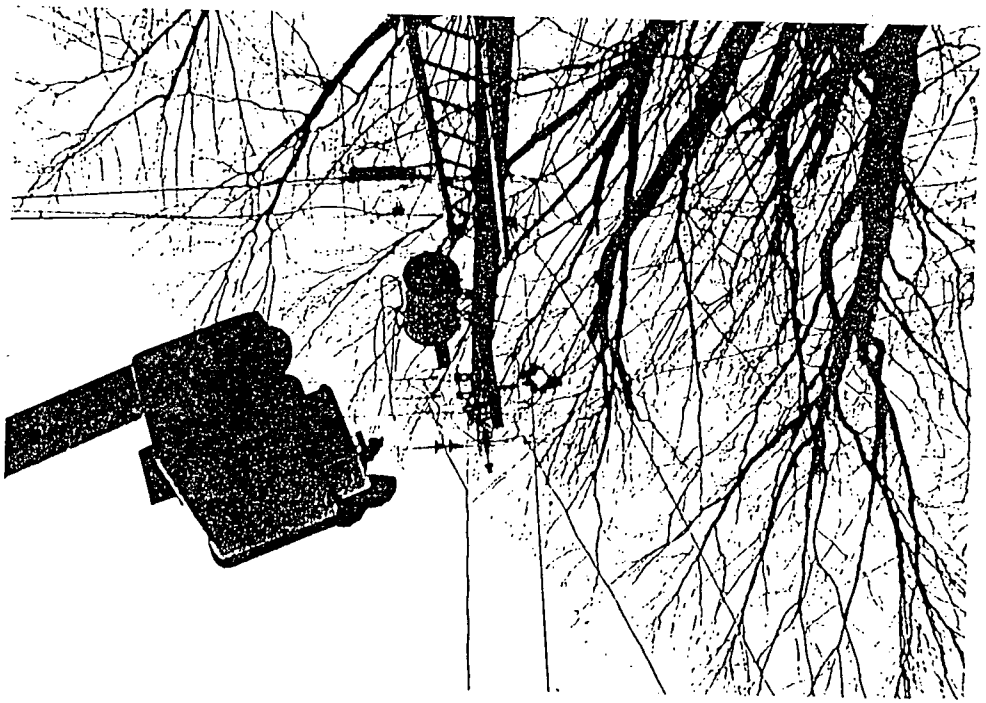


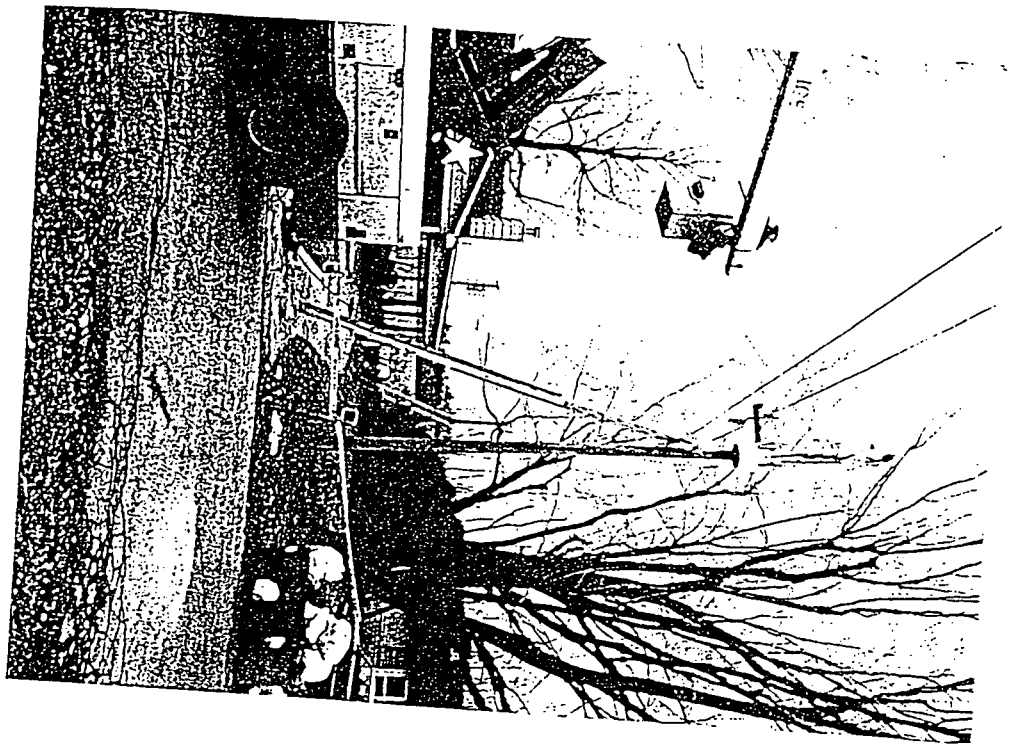


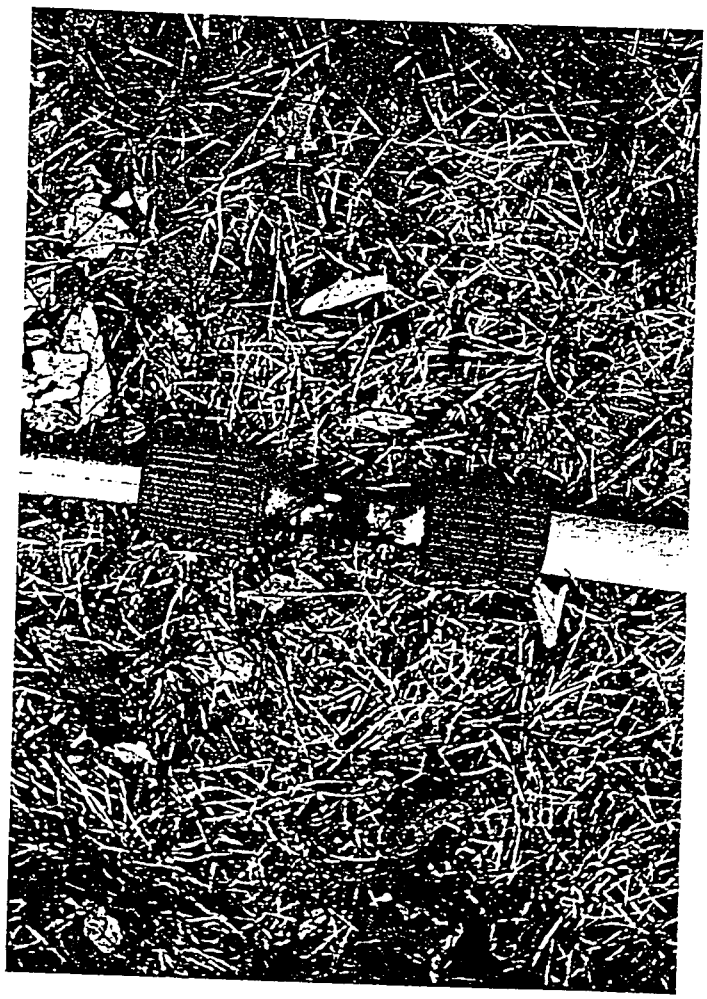


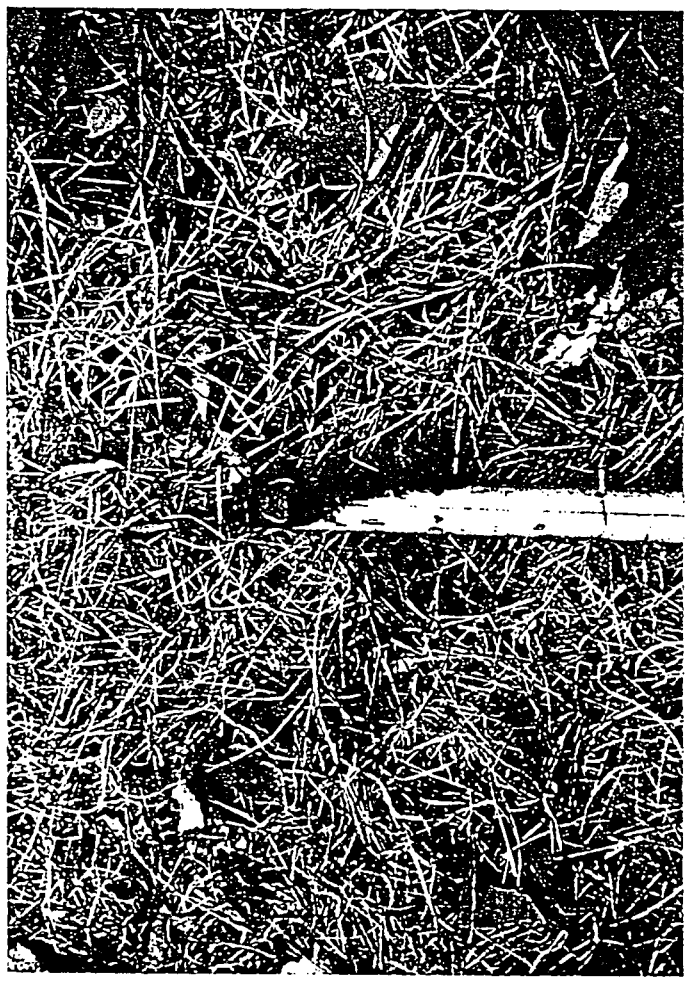


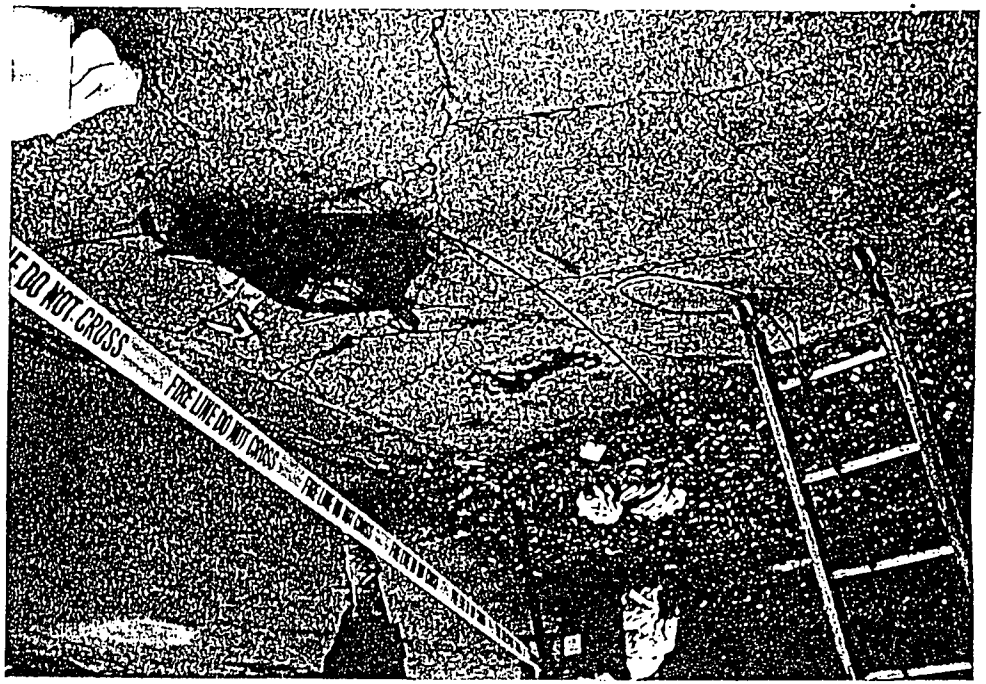








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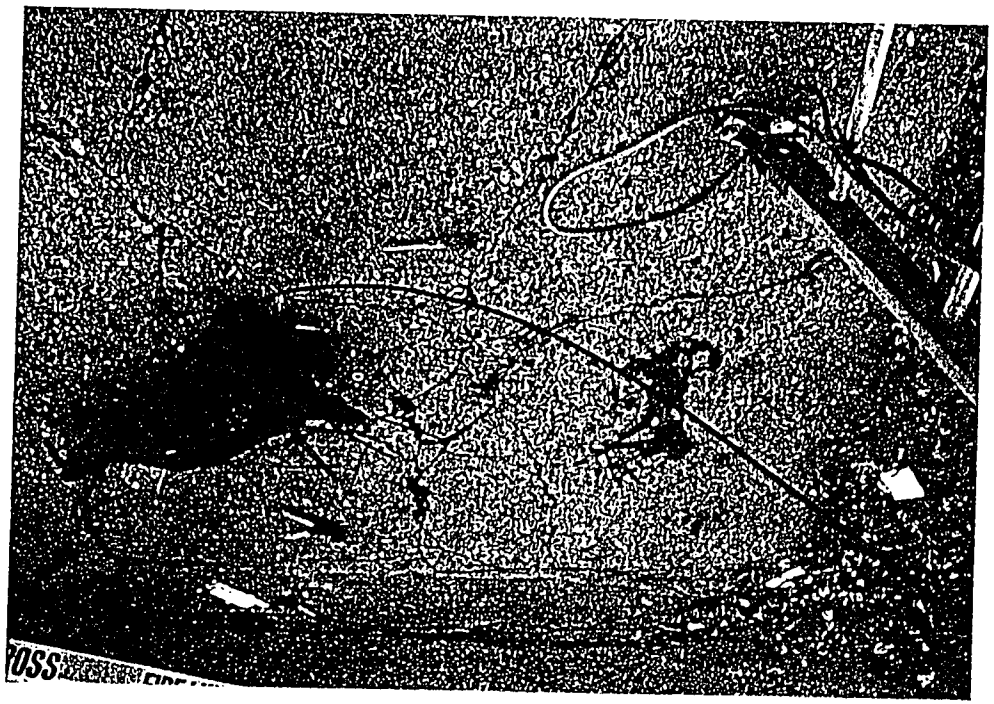
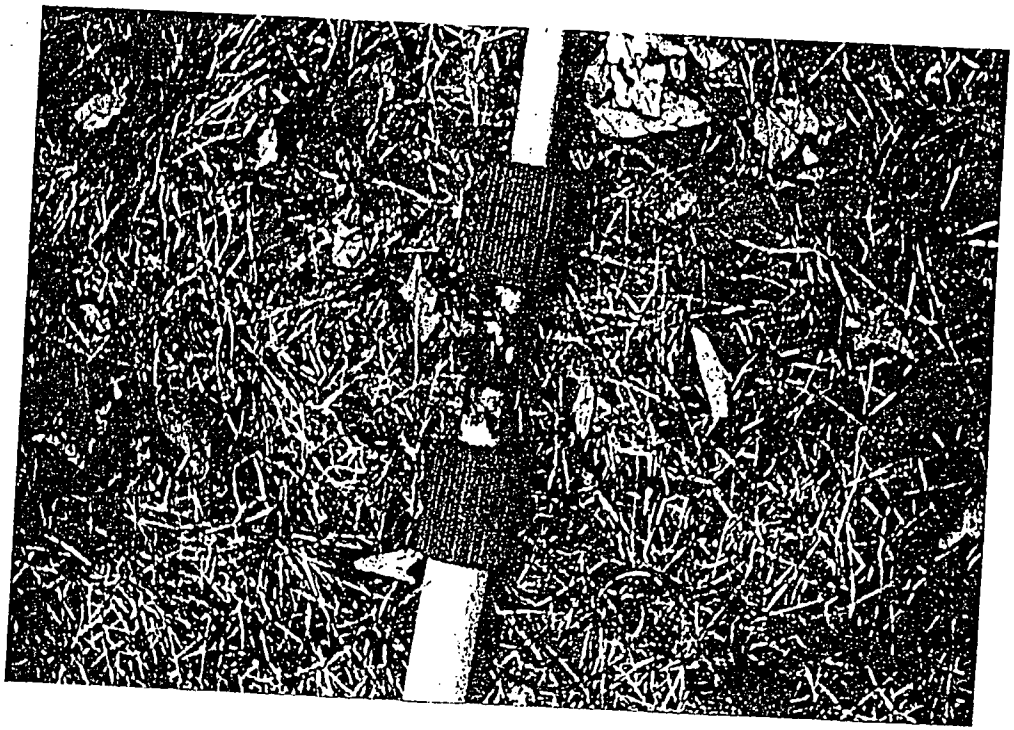
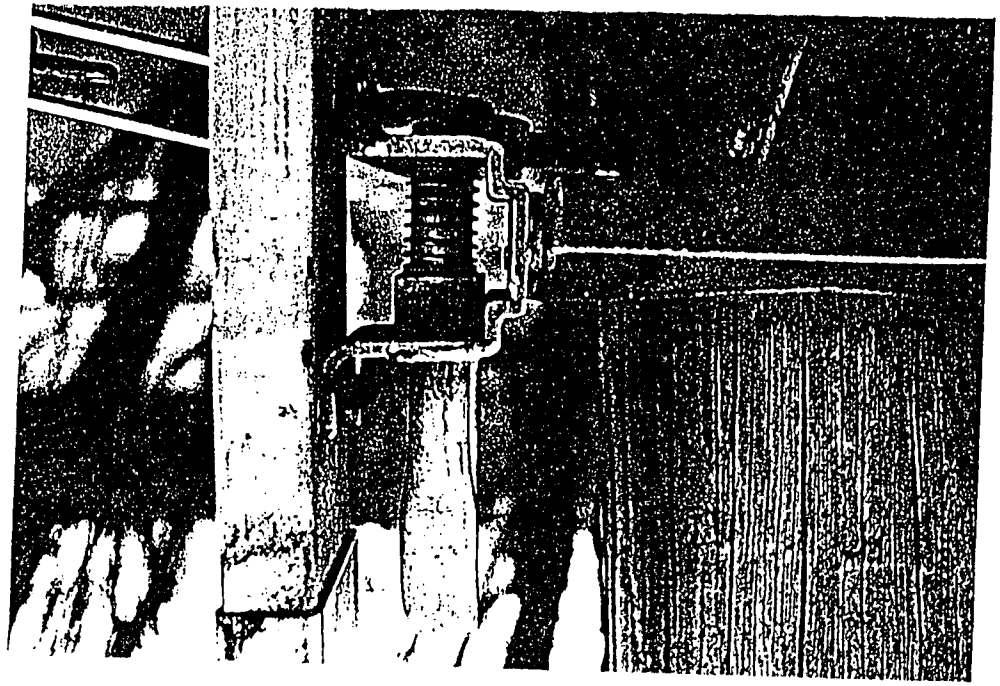
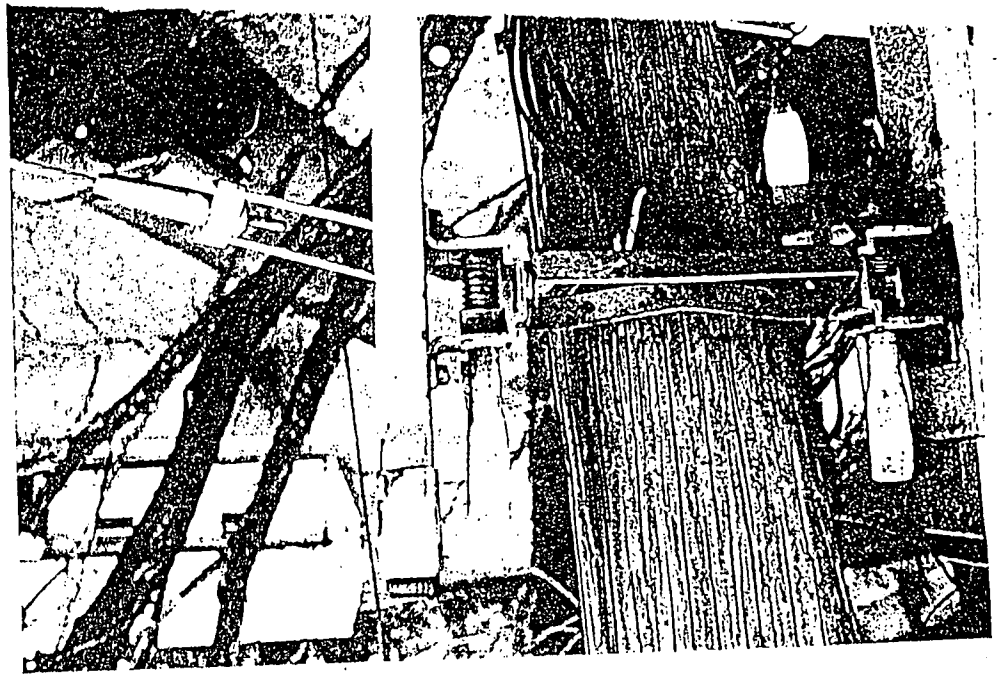
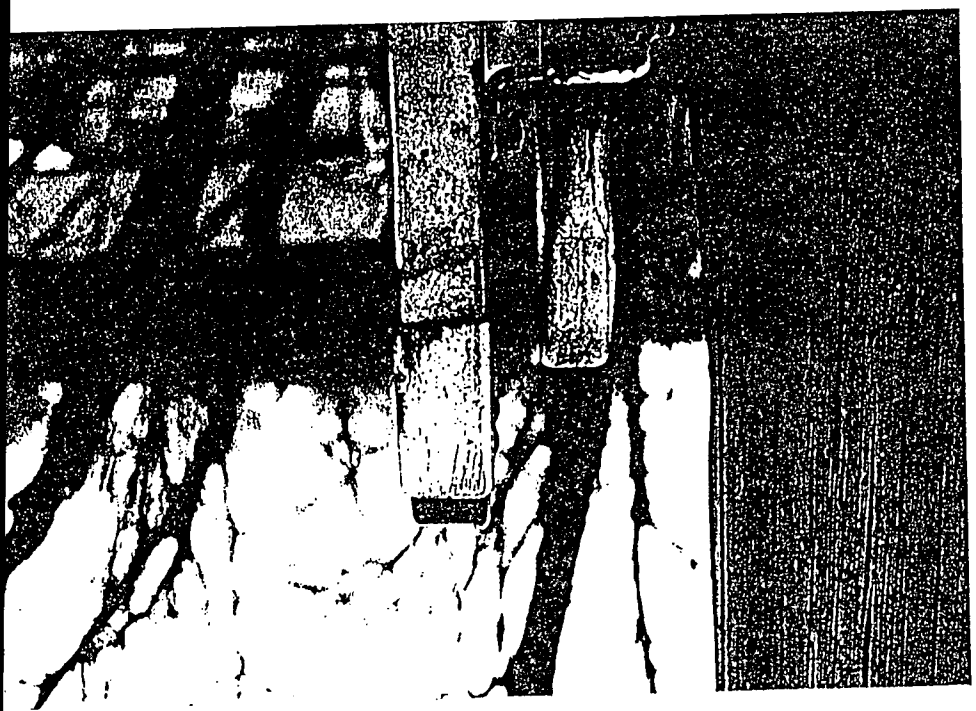
FIRE LINE DO NOT CROSS

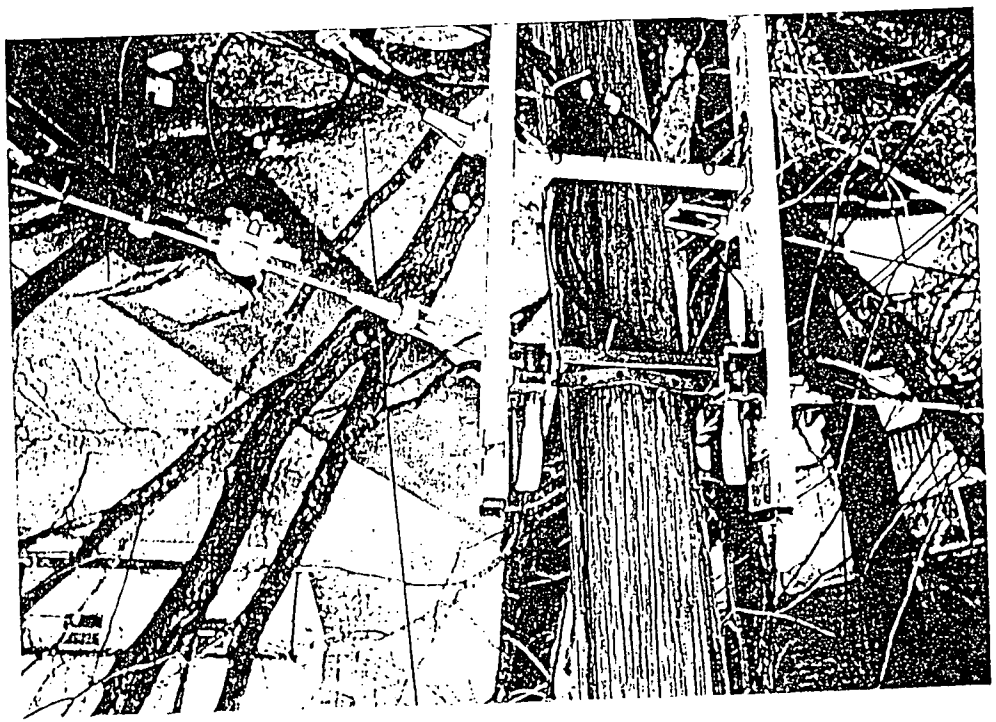


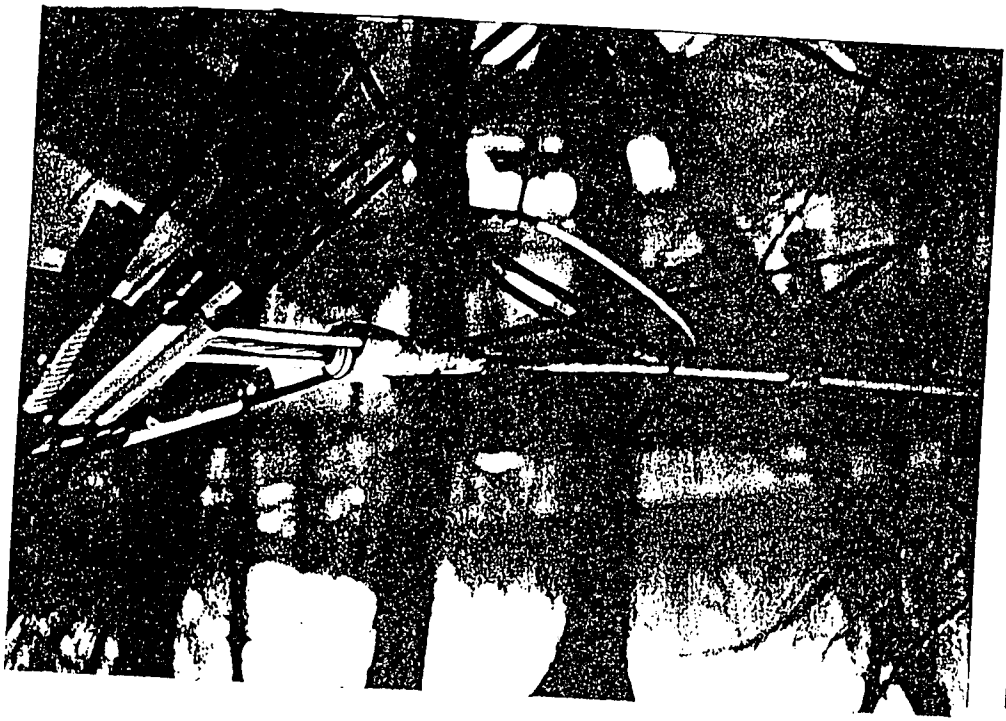


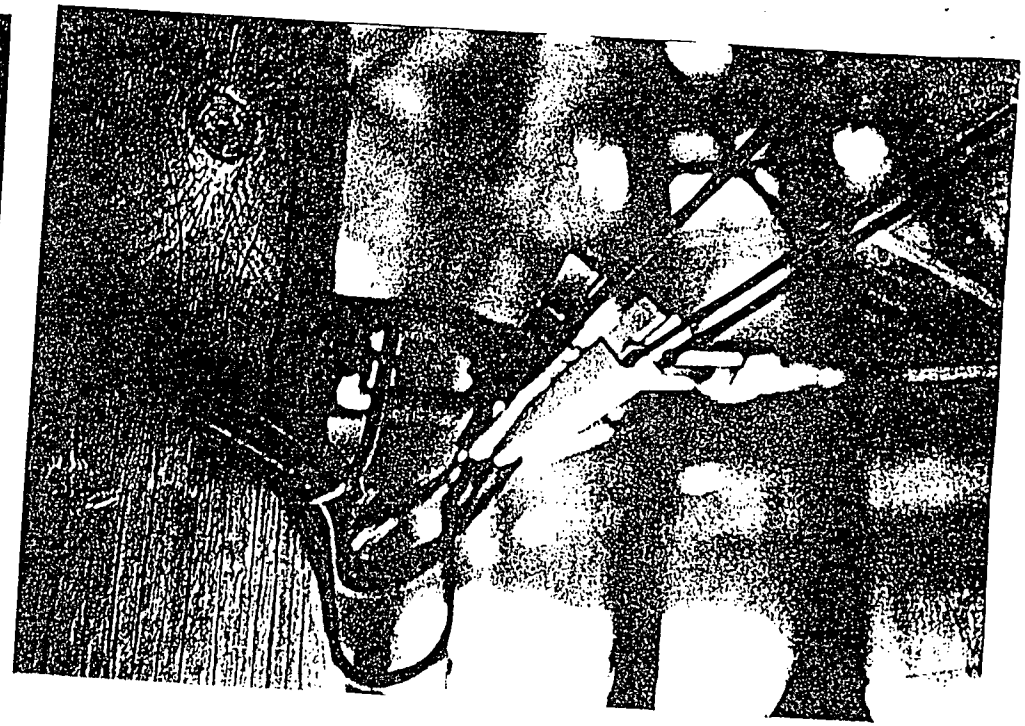


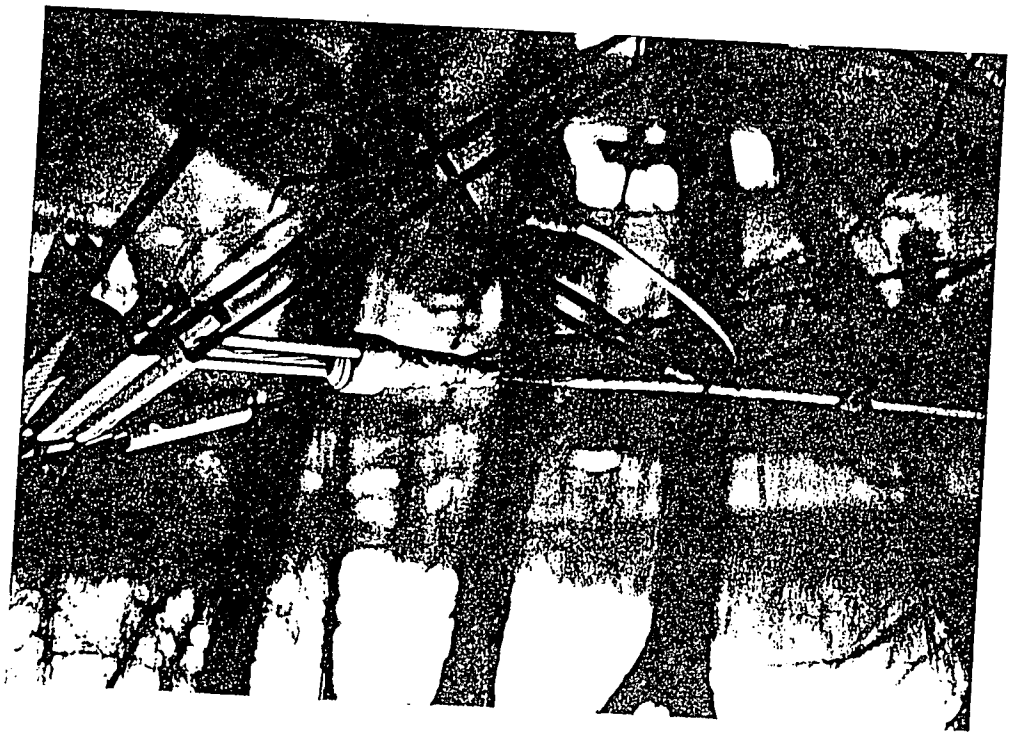


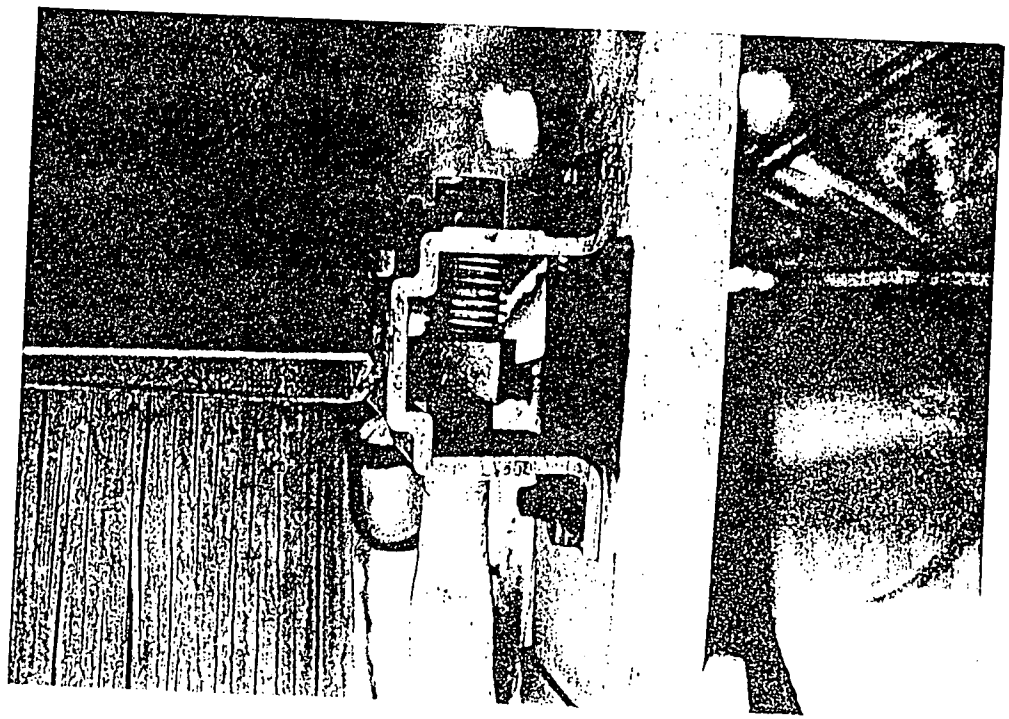


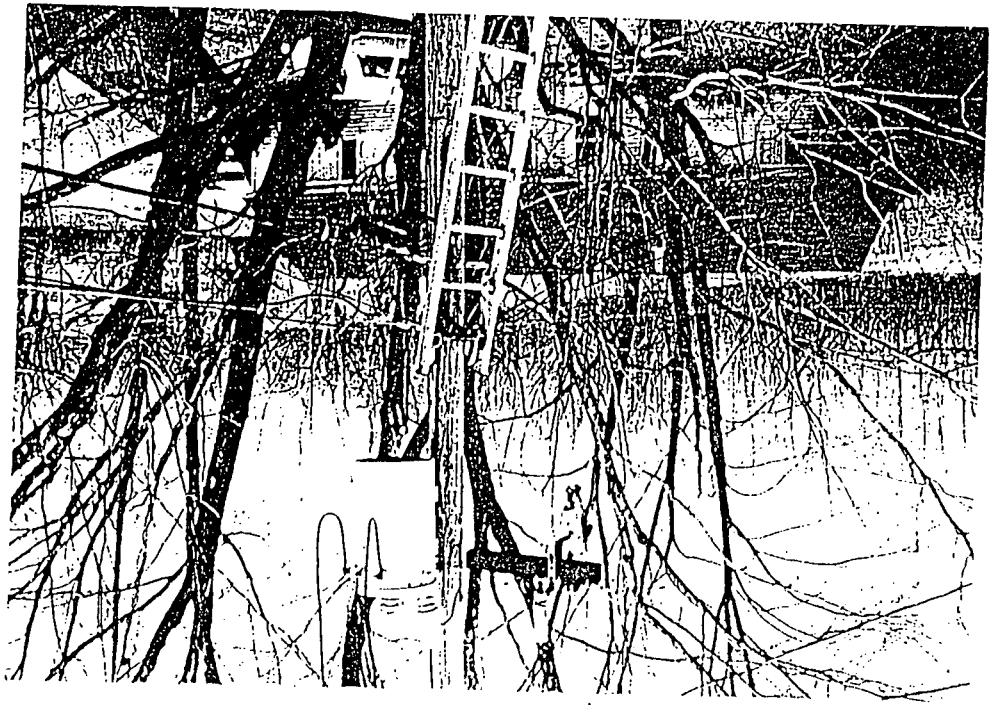


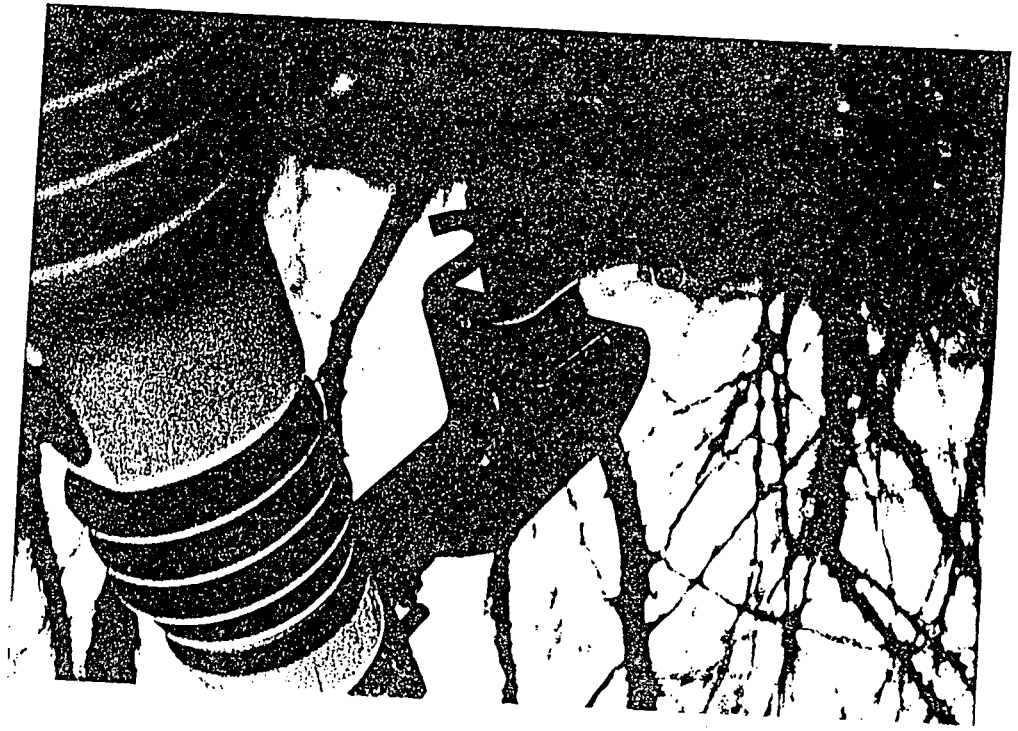


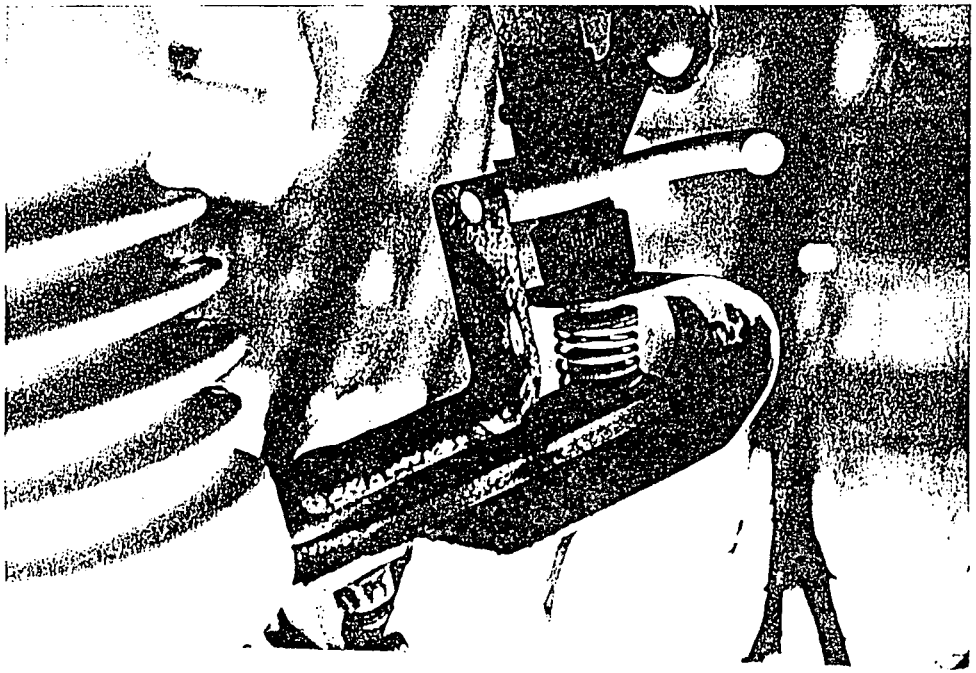


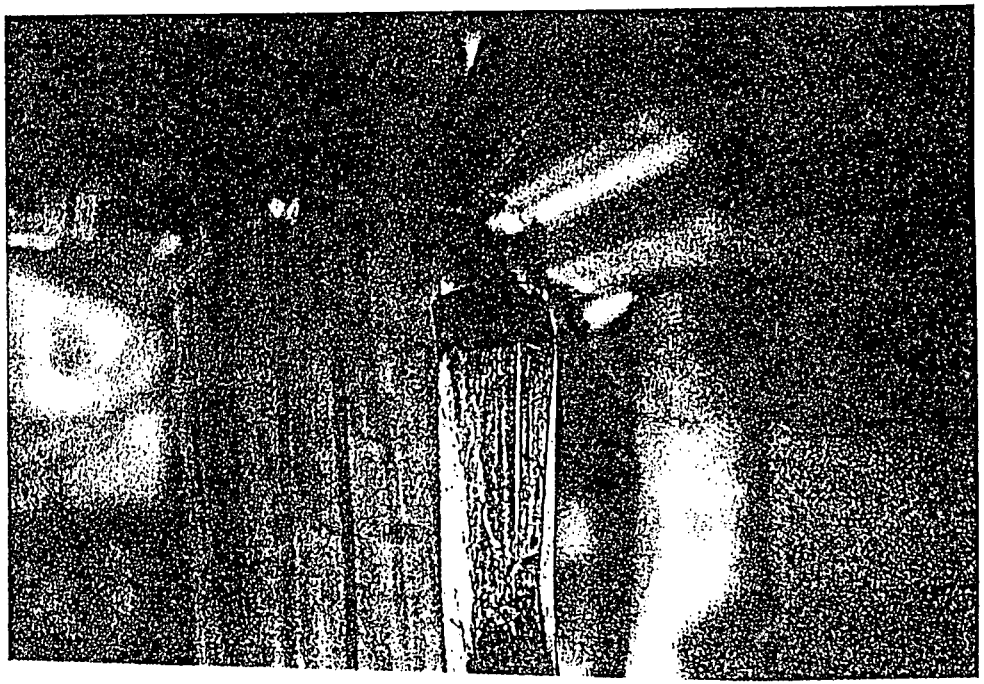


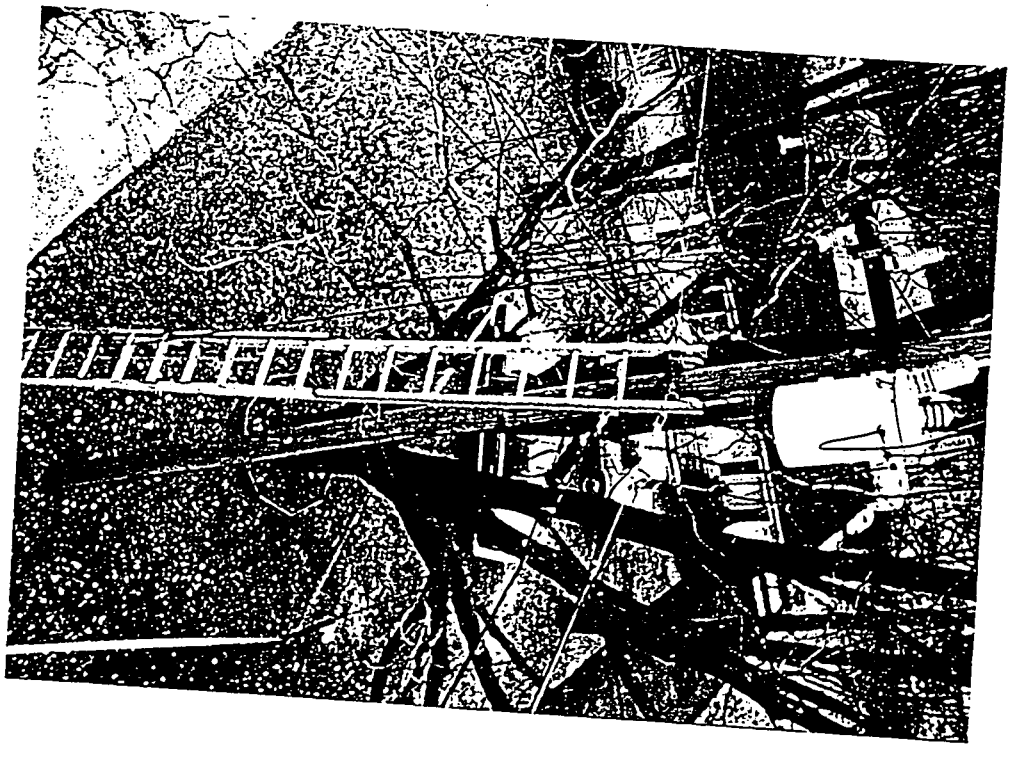






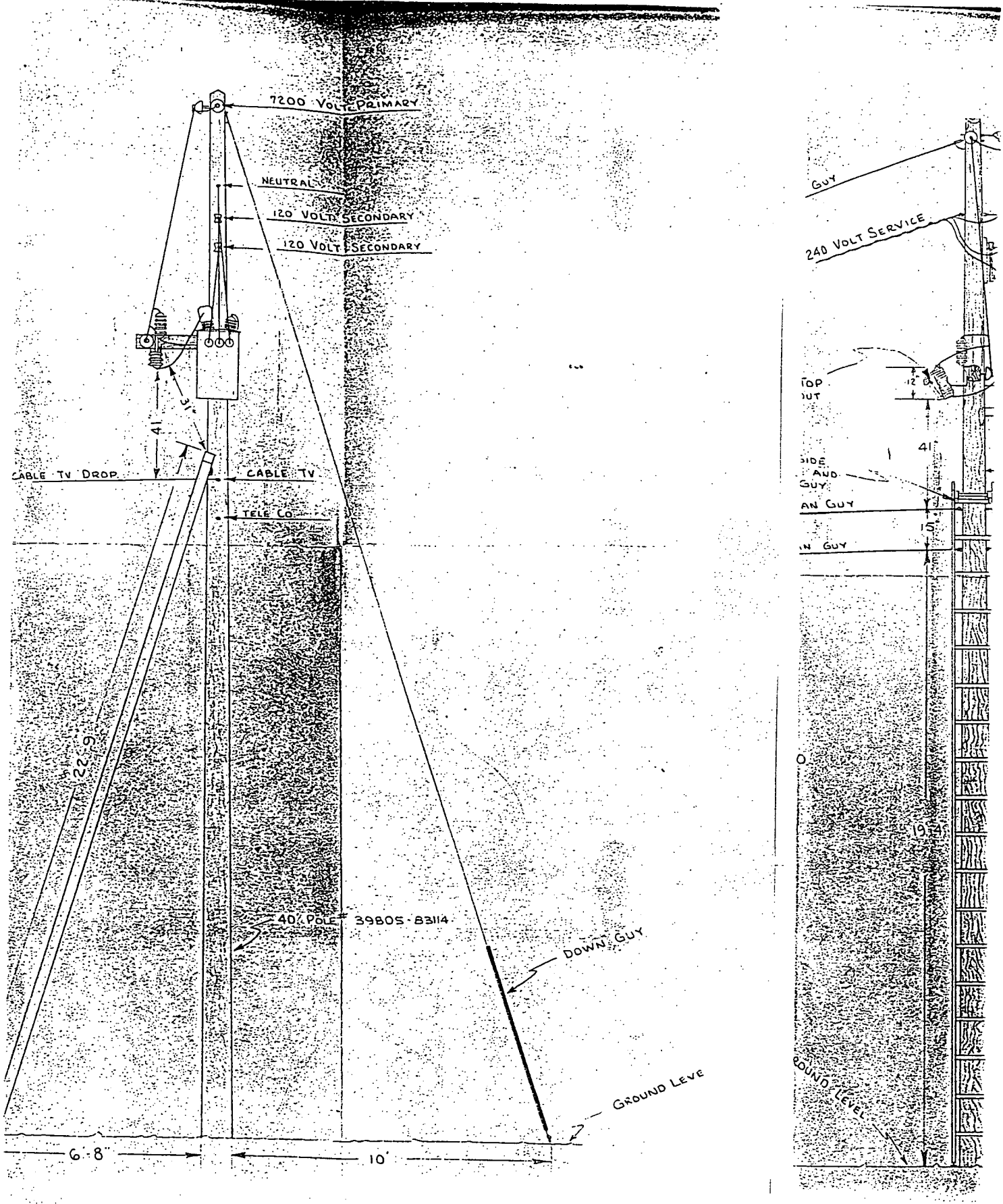


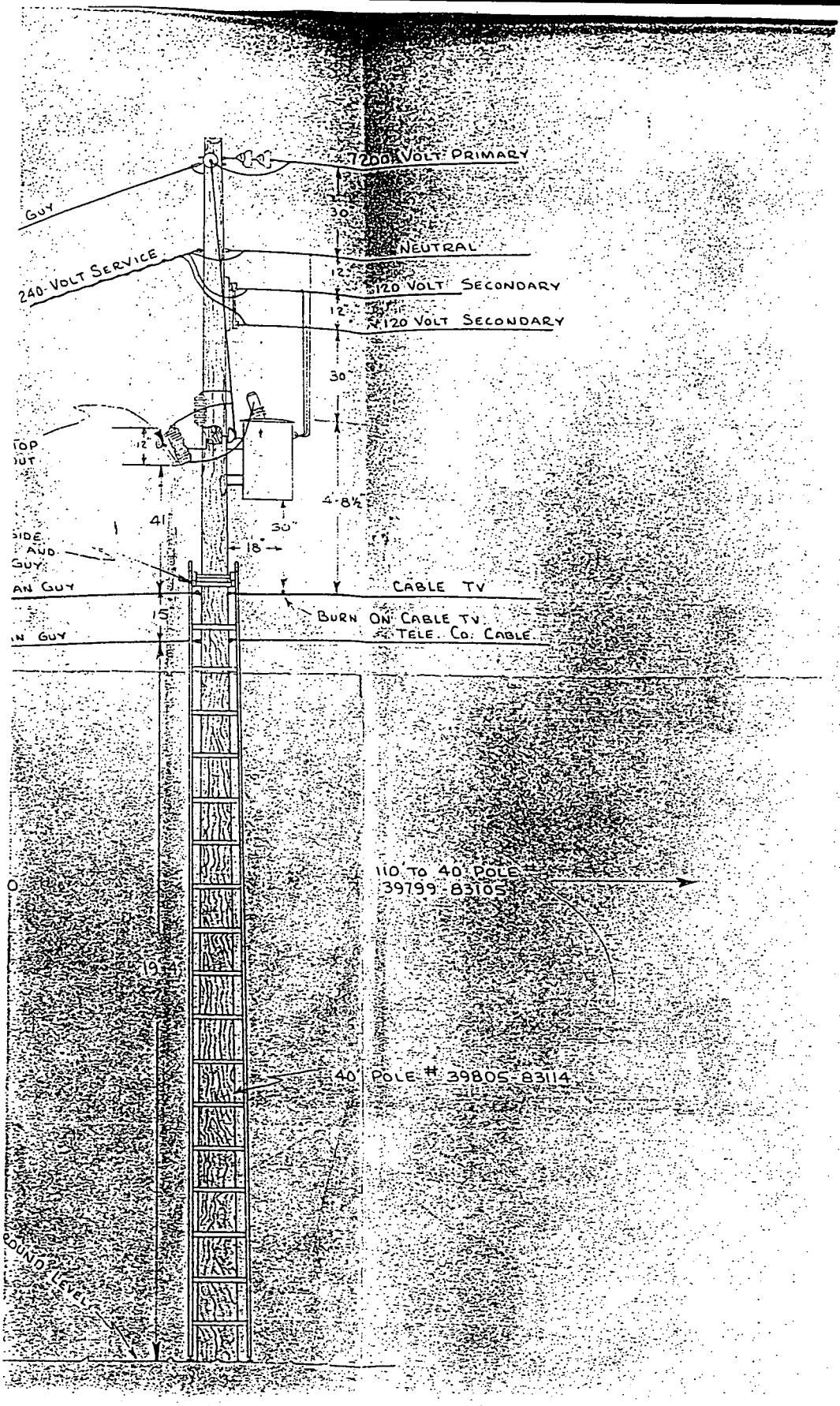




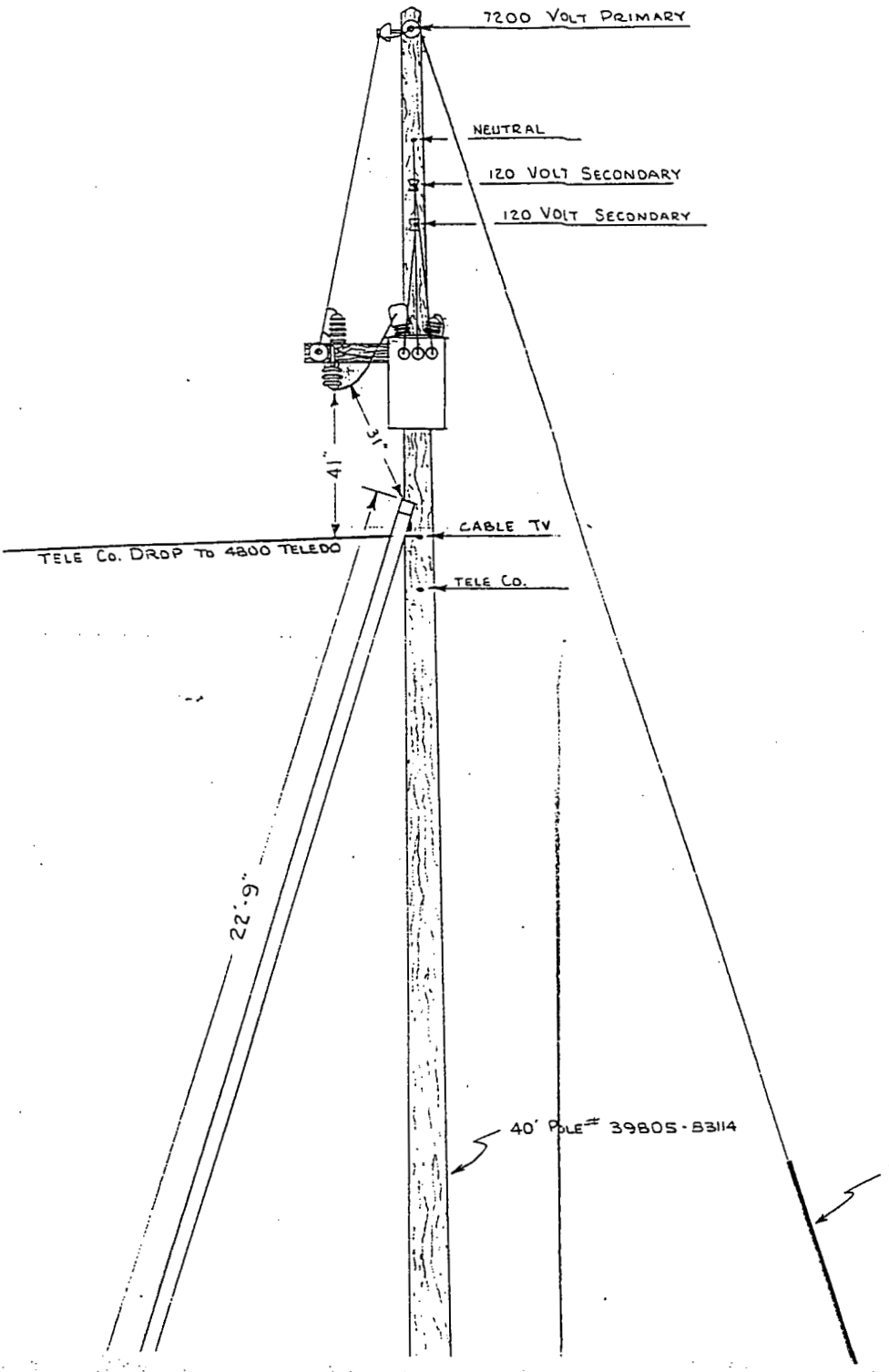
Attachment D

Drawings Provided by LG&E


7200 VOLT PRIMARY
NEUTRAL
120 VOLT SECONDARY
120 VOLT SECONDARY
41
31
CABLE TV DROP
CABLE TV
TELE CO
22.9
40' POLE # 39805-83114
DOWN GUY
GROUND LEVE
6.8
10'
GUY
240 VOLT SERVICE
41
15
19.4
GROUND LEVEL



TELE CO. DROP T



SPAN

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BURN'S ON T
SIDE OF CUTO

BURN'S ON BACK S
OF LADDER HOOKS
CABLE TV SPAN G

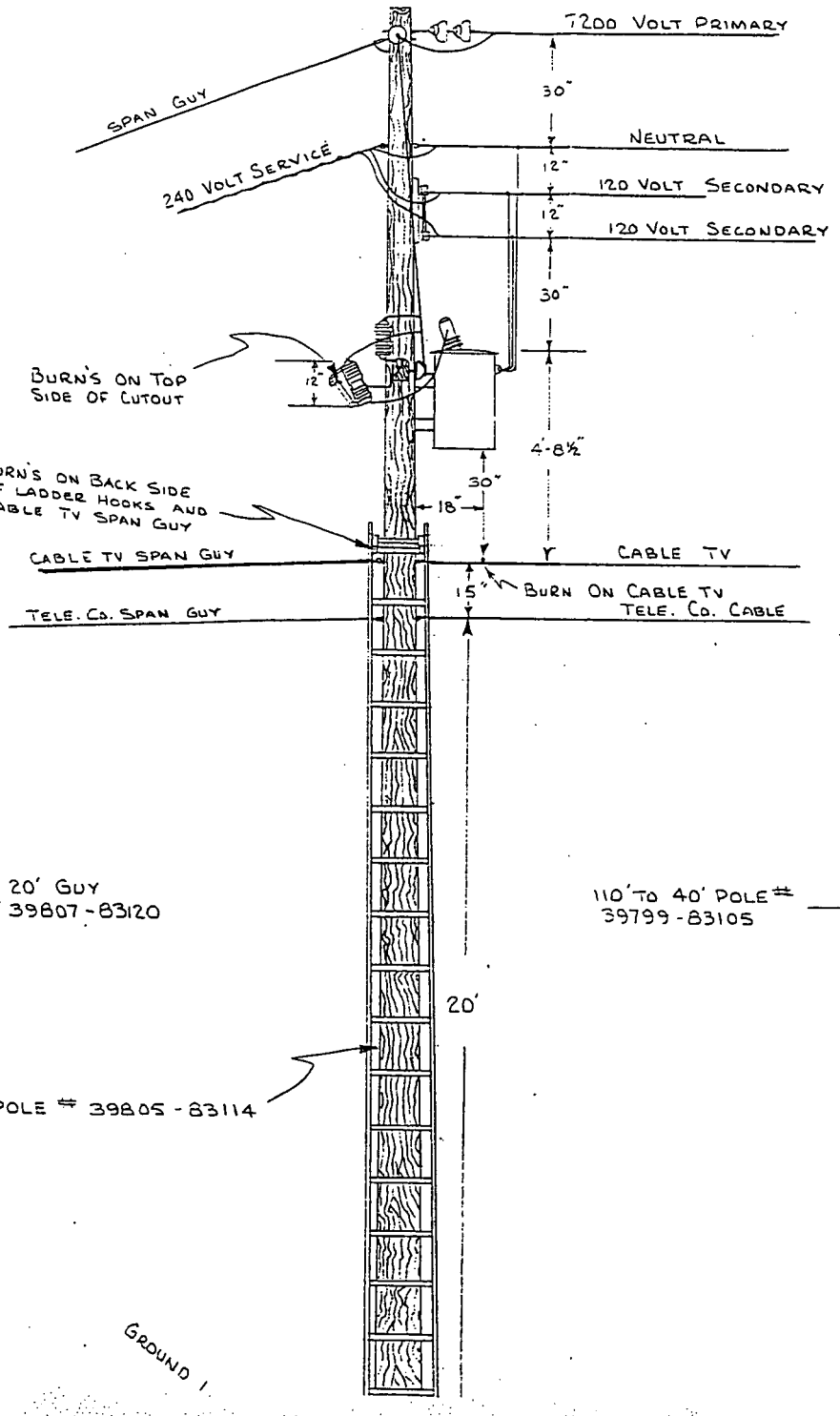
CABLE TV SP

TELE. CO. SPA

— 67' TO 20' GUY
POLE # 39807-83120

40' POLE # 3980

G



67' TO 20' GUY POLE # 39807-83120

110' TO 40' POLE # 39799-83105

40' POLE # 39805-83114